SEQUENCE LISTING

<110> PURINA MILLS, LLC

<120> BOVINE LEPTIN PROTEIN, ANTISENSE AND ANTIBODY

<130> LL31.12-0015

<140> US 09/928,522
<141> 2001-08-13

<150> US 08/688,908
<151> 1996-07-31

<160> 8

<170> PatentIn version 3.3

<210> 1
<211> 36
<212> DNA
<213> Artificial

<220>
<223> Primer

<400> 1
ggatccggtc tcaggccgtg ccyatccara aagtcc 36

<210> 2
<211> 30
<212> DNA
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<220>
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<400> 2
gaattcagcg ctgcayycag ggctrasrtc 30

<210> 3
<211> 449
<212> DNA
<213> Bos taurus

<220>
<221> DNA
<222> (6)..(443)
<223> Nucleotide sequence (cDNA) of the coding region of bovine leptin minus the secretory signal

<400> 3
aggccgtgcc tatccagaaa gtccaggatg acaccaaaac cctcatcaag acaattgtca 60

ccaggatcaa tgacatctca cacacgcagt ccgtctcctc caaacagagg gtcactggtt 120

tggacttcat ccctgggctc caccctctcc tgagtttgtc caagatggac cagacattgg 180

cgatctacca acagatcctc accagtctgc cttccagaaa tgtggtccaa atatccaatg 240

acctggagaa cctccgggac cttctccacc tgctggccgc ctccaagagc tgccccttgc 300

cgcaggtcag ggccctggag agcttggaga gcttgggtgt cgtcctggaa gcctccctct 360

actccaccga ggtggtggcc ctgagccggc tgcaggggtc actacaggac atgttgcggc 420

agctggacct cagccctgaa tgcagcgct 449

<210> 4
<211> 146
<212> PRT
<213> Bos taurus

<220>
<221> Protein
<222> (1)..(146)
<223> Amino acid translation of the coding region of bovine leptin minus the scretory signal

<400> 4

Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys Thr Leu Ile Lys Thr
1 5 10 15

Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr Gln Ser Val Ser Ser
20 25 30

Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro Gly Leu His Pro Leu
35 40 45

Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala Ile Tyr Gln Gln Ile
50 55 60

Leu Thr Ser Leu Pro Ser Arg Asn Val Val Gln Ile Ser Asn Asp Leu
65 70 75 80

Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala Ala Ser Lys Ser Cys
85 90 95

Pro Leu Pro Gln Val Arg Ala Leu Glu Ser Leu Glu Ser Leu Gly Val
100 105 110

Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val Val Ala Leu Ser Arg
115 120 125

Leu Gln Gly Ser Leu Gln Asp Met Leu Arg Gln Leu Asp Leu Ser Pro
130 135 140

Glu Cys
145

<210> 5
<211> 445
<212> DNA
<213> Homo sapiens

<220>
<221> DNA
<222> (1)..(445)
<223> Nucleotide sequence of human leptin

<400> 5
aagctgtgcc catccaaaaa gtccaagatg acaccaaaac cctcatcaag acaattgtca 60

ccaggatcaa tgacatttca cacacgcagt cagtctcctc caaacagaaa gtcaccggtt 120

tggacttcat tcctgggctc caccccatcc tgaccttatc caagatggac cagacactgg 180

cagtctacca acagatcctc accagtatgc cttccagaaa cgtgatccaa atatccaacg 240

acctggagaa cctccgggat cttcttcacg tgctggcctt ctctaagagc tgccacttgc 300

cctgggccag tggcctggag accttggaca gcctgggggg tgtcctggaa gcttcaggct 360

actccacaga ggtggtggcc ctgagcaggc tgcaggggtc tctgcaggac atgctgtggc 420

agctggacct cagccctggg tgctg 445

<210> 6
<211> 445
<212> DNA
<213> Murine (Mouse)

<220>
<221> DNA
<222> (1)..(445)
<223> Nucleotide sequence of murine leptin

<400> 6
aagcagtgcc tatccagaaa gtccaggatg acaccaaaac cctcatcaag accattgtca 60

ccaggatcaa tgacatttca cacacgcagt cggtatccgc caagcagagg gtcactggct 120

tggacttcat tcctgggctt caccccattc tgagtttgtc caagatggac cagactctgg 180

cagtctatca acaggtcctc accagcctgc cttcccaaaa tgtgctgcag atagccaatg 240

acctggagaa tctccgagac ctcctccatc tgctggcctt ctccaagagc tgctccctgc 300

ctcagaccag tggcctgcag aagccagaga gcctggatgg cgtcctggaa gcctcactct 360

actccacaga ggtggtggct ttgagcaggc tgcagggctc tctgcaggac attcttcaac 420

agttggatgt tagccctgaa tgctg 445

<210> 7
<211> 167
<212> PRT
<213> Homo sapiens

<220>
<221> Protein
<222> (1)..(167)
<223> Amino acid translation of human leptin

<400> 7

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Met His Trp Gly Thr Leu Cys Gly Phe Leu Trp Leu Trp Pro Tyr Leu
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Phe Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
            20                  25                  30

Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
        35                  40                  45

Gln Ser Val Ser Ser Lys Gln Lys Val Thr Gly Leu Asp Phe Ile Pro
    50                  55                  60

Gly Leu His Pro Ile Leu Thr Leu Ser Lys Met Asp Gln Thr Leu Ala
65                  70                  75                  80

Val Tyr Gln Gln Ile Leu Thr Ser Met Pro Ser Arg Asn Val Ile Gln
                85                  90                  95

Ile Ser Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Val Leu Ala
            100                 105                 110

Phe Ser Lys Ser Cys His Leu Pro Trp Ala Ser Gly Leu Glu Thr Leu
        115                 120                 125

Asp Ser Leu Gly Gly Val Leu Glu Ala Ser Gly Tyr Ser Thr Glu Val
    130                 135                 140

Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Met Leu Trp Gln
145                 150                 155                 160

Leu Asp Leu Ser Pro Gly Cys
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<210> 8
<211> 167
<212> PRT
<213> Murine (Mouse)

<220>
<221> Protein
<222> (1)..(167)
<223> Amino acid translation of murine leptin

<400> 8

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Met Cys Trp Arg Pro Leu Cys Arg Phe Leu Trp Leu Trp Ser Tyr Leu
1               5                  10                  15

Ser Tyr Val Gln Ala Val Pro Ile Gln Lys Val Gln Asp Asp Thr Lys
            20                  25                  30

Thr Leu Ile Lys Thr Ile Val Thr Arg Ile Asn Asp Ile Ser His Thr
        35                  40                  45

Gln Ser Val Ser Ala Lys Gln Arg Val Thr Gly Leu Asp Phe Ile Pro
    50                  55                  60

Gly Leu His Pro Ile Leu Ser Leu Ser Lys Met Asp Gln Thr Leu Ala
65                  70                  75                  80

Val Tyr Gln Gln Val Leu Thr Ser Leu Pro Ser Gln Asn Val Leu Gln
                85                  90                  95

Ile Ala Asn Asp Leu Glu Asn Leu Arg Asp Leu Leu His Leu Leu Ala
            100                 105                 110

Phe Ser Lys Ser Cys Ser Leu Pro Gln Thr Ser Gly Leu Gln Lys Pro
        115                 120                 125

Glu Ser Leu Asp Gly Val Leu Glu Ala Ser Leu Tyr Ser Thr Glu Val
    130                 135                 140

Val Ala Leu Ser Arg Leu Gln Gly Ser Leu Gln Asp Ile Leu Gln Gln
145                 150                 155                 160

Leu Asp Val Ser Pro Glu Cys
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